Amendments to the Claims

What is claimed is:

1. (Currently Amended) A method of producing aluminum comprising:

passing current between a stable anode ~~comprising iron oxide~~ and a cathode through a bath comprising an electrolyte and aluminum oxide, where the anode is a material selected from the group consisting of Fe_3O_4, Fe_2O_3, FeO and mixtures thereof, where at lease one of Fe_3O_4 and Fe_2O_3 is present, and where the anode may optionally contain additive;

maintaining the bath at a controlled temperature less than about 960°C;

controlling current density through the anode; and

recovering aluminum from the bath.

2. (Canceled)

3. (Original) The method of Claim 1, wherein the controlled temperature of the bath is from about 800 to about 930°C.

4. (Original) The method of Claim 1, wherein the current density is from about 0.1 to about 6 Amp/cm^2.

5. (Original) The method of Claim 1, wherein the current density is from about 0.25 to about 2.5 Amp/cm^2.

6. (Canceled)

7. (Currently Amended) The method of Claim 1, wherein the iron oxide ~~comprises~~ is at least 90 weight percent of the anode.

8. (Currently Amended) The method of Claim 1, wherein the iron oxide ~~comprises~~ is from zero to 100 weight percent Fe_3O_4, from zero to 100 weight percent Fe_2O_3, and from zero to 50 weight percent FeO.

9. (Currently Amended) The method of Claim 1, wherein the iron oxide ~~comprises~~ is Fe_3O_4.

10. (Currently Amended) The method of Claim 1, wherein the iron oxide ~~comprises~~ is Fe_2O_3.

11. (Canceled)

12. (Canceled).

13. (Currently Amended) The method of Claim 12, wherein the additive ~~comprises~~ is an oxide of Al, Si, Ca, Mn, Mg, B, P, Ba, Sr, Cu, Zn, Co, Cr, Ga, Ge, Hf, In, Ir, Mo, Nb, Os, Re, Rh, Ru, Sc, Sn, Ti, V, W, Zr, Li, Ce, Y and/or F.

14. (Currently Amended) The method of Claim ~~12~~ 1, wherein the additive ~~comprises~~ is an oxide of Al, Si, Ca, Mn and/or Mg.

15. (Original) The method of Claim 1, wherein the recovered aluminum comprises less than about 0.5 weight percent Fe.

16. (Original) The method of Claim 1, wherein the recovered aluminum comprises less than about 0.4 weight percent Fe.

17. (Original) The method of Claim 1, wherein the recovered aluminum comprises less than about 0.3 weight percent Fe.

18. (Original) The method of Claim 1, wherein the recovered aluminum comprises a maximum of about 0.2 weight percent Fe, a maximum of about 0.034 weight percent Cu, and a maximum of about 0.034 weight percent Ni.

19. (Currently Amended) A stable anode ~~comprising iron oxide~~ for use in an electrolytic metal production cell~~.~~, where the anode is a material selected from the group consisting of Fe_3O_4, Fe_2O_3, FeO and mixtures thereof, where at lease one of Fe_3O_4 and Fe_2O_3 is present, and where the anode may optionally contain additive.

20. (Currently Amended) The stable anode of Claim 19, wherein the iron oxide ~~comprises~~ is from zero to 100 weight percent Fe_3O_4, from zero to 100 weight percent Fe_2O_3, and from zero to 50 weight percent FeO~~.~~, where at least one of the iron oxides Fe_3O_4 and Fe_2O_3 is present.

21. (Currently Amended) The stable anode of Claim 19, wherein the iron oxide ~~comprises~~ is Fe_3O_4.

22. (Currently Amended) The stable anode of Claim 19, wherein the iron oxide ~~comprises~~ is Fe_2O_3.

23. (Currently Amended) The stable anode of Claim 19, further ~~comprising~~ containing up to about ~~90~~ 10 weight percent of an additive selected from oxides of Al, Si, Ca, Mn, Mg, B, P, Ba, Sr, Cu, Zn, Co, Cr, Ga, Ge, Hf, In, Ir, Mo, Nb, Os, Re, Rh, Ru, Se, Sn, Ti, V, W, Zr, Li, Ce, Y and/or F.

24. (Currently Amended) The stable anode of Claim 19, wherein the anode ~~comprises~~ is a monolithic body, ~~comprising the iron oxide.~~

25. (Currently Amended) The stable anode of Claim 19, wherein the anode ~~comprises~~ has a surface coated with the iron oxide.

26. (Original) The stable anode of Claim 19, wherein the anode remains stable in a molten bath of the electrochemical cell at a temperature of up to 960°C.

27. (Canceled)

28. (Canceled)

29. (Canceled)